

A REQUEST FOR PROPOSAL FOR PERSONAL SERVICES CONTRACT

Department of Highways Professional Services Procurement Bulletin 2014-10 Statewide Geotechnical Engineering & Laboratory Testing

This document constitutes a Request for Proposals for Personal Service Contract from qualified individuals and organizations to furnish those services as described herein for the Commonwealth of Kentucky, Department of Highways.

I. PROJECT DESCRIPTION

Statewide Geotechnical Engineering and Laboratory Testing on an as needed basis.

II. PROJECT INFORMATION

Project Manager – Bart Asher, P.E.

User Division – Structural Design

Approximate Fee – \$1,250,000 upset limit (per contract)

Projects to be assigned by letters of agreement not to exceed \$300,000

Project Length – The contract period is each firm receiving a two-year contract.

Project Funding – State and Federal Funds

III. PURPOSE AND NEED

To provide geotechnical engineering and laboratory testing services on an as needed basis to help expedite the completion of projects and effectively handle the workload on a statewide basis during FY 2015 and 2016.

Some projects may require limited surveying and roadway design necessary to prepare a complete set of roadway plans for the design of landslide, rock-fall, and other small project corrections. A prequalified subconsultant may be used on these projects. Prequalification in the areas of Rural Roadway Design and Surveying and/or the names of subconsultants are not required to be identified in the Response to Announcement; these issues will be addressed at a later time.

IV. DBE REQUIREMENT

Consultant team should include a DBE Participation Plan with their response to announcement. An additional 1 page may be added to the project approach (Page 7) in response to announcement to convey this plan. A maximum of 4 points will be considered in the evaluation factors to DBE Participation Plans.

V. SCOPE OF WORK

Services will be performed in general accordance with the KYTC Geotechnical Manual and other applicable KYTC and/or FHWA documents, with exceptions, clarifications, or additions identified during negotiations and/or on a project by project basis. The services will include but are not necessarily limited to the following:

CONVENTIONAL GEOTECHNICAL ENGINEERING ANALYSES:

Slope Stability, Settlement, Deep Foundation, Wave Equation Drivability, Negative Skin Friction, Bearing Capacity, and Retaining Wall.

SEISMIC GEOTECHNICAL ENGINEERING ANALYSES:

Simplified Seismic Site Response, Equivalent-Linear One Dimensional Site Response, Liquefaction, Earthquake Induced Settlement, Pseudo-Static Slope Stability.

LOAD AND RESISTANCE FACTOR DESIGN (LRFD): Conform to the AASHTO LRFD Bridge Design Specifications, current edition, with interims, for projects that involve structural foundations and retaining walls.

DRAFTING: Preparing Microstation CADD drawings of roadway soil profile sheets, embankment and cut stability sheets, structure subsurface data sheets, geotechnical note sheets, and other related drafting.

PRELIMINARY PLANS: Boring, Laboratory Requests, and Analysis Request.

MEETINGS: Preliminary, Rock Core, Interim, and Final Meetings.

REPORTS: Writing and publishing Geotechnical Engineering Reports in hard copy and electronic format in accordance with applicable sections of the Geotechnical Guidance Manual.

LOGGING ROCK CORES

GEOTECHNICAL LABORATORY TESTING: *Refer to the Summary of Laboratory Tests and Specified Production Rates* in the Word document described below for a list of laboratory tests. Tests included in Items 1-12 in this schedule may be required on a regular basis; Items 13-20 will be used rarely. Upon request, provide laboratory test reports according to KYTC format.

RURAL ROADWAY DESIGN AND SURVEYING: Performing Rural Roadway Design and Surveying as necessary to prepare a complete set of roadway plans for the design of landslide, rock fall and other small project corrections.

SPECIALTY SERVICES: Services such as in-situ testing, geophysical testing, etc., may be included with details to be discussed on a project-specific basis.

VI. ENVIRONMENTAL

Any Laboratory testing on contaminated soils or rock may be sub-contracted.

VII. GEOTECHNICAL SERVICES

Consultant will provide geotechnical engineering and laboratory testing services.

VIII. RURAL ROADWAY SERVICES

Consultant may be required to provide rural roadway design on some projects.

IX. SURVEYING

Consultant may be required to provide surveying on some projects.

X. STRUCTURE DESIGN

Consultant may be required to provide limited foundation structural design on some projects.

XI. SPECIAL INSTRUCTIONS

Four (4) firms will be selected to provide these services. The contract period is each firm receiving a two-year contract. The firms will be placed in a pool, randomly drawn and listed in consecutive order (1-4). This order will determine the numerical order in which projects will be offered to firms on a rotating basis. Firms will not be offered an additional project until the remaining firms on the list have been offered a project. If a firm declines to accept a project, or does not respond to an invitation to perform services for a project within 7 calendar days, documentation shall be placed in the project files and the next firm shall be offered the project. If the next firm on the list declines, the project shall be offered to the next firm, etc.

Some projects may require additional work after the 2 year contract period. This will require a contract modification.

The selected firms must be capable of performing a variety of geotechnical engineering and laboratory testing services. A few projects may require capability of performing structural foundation design, surveying and rural roadway design.

All selected firms must have staffs who demonstrate proficiency in the field of geotechnical engineering and laboratory testing for transportation facilities on highway projects for KYTC and/or for federal, local or other state governmental agencies; experience on challenging projects and applicable continuing education are desirable. The firms must clearly demonstrate qualifications, experience, and capabilities in the areas below; they may not necessarily meet all these criteria, but the criteria do represent a benchmark.

Conventional Geotechnical Engineering Experience & Capabilities

Preparing geotechnical submittals in accordance with KYTC format, including: Boring, Laboratory Testing, and Engineering Analysis Plans; Cost Estimates and Invoices for Engineering and Laboratory Testing Services.

Preparing CADD drawings including roadway soil profile sheets, embankment and cut stability sheets, structure subsurface data sheets, geotechnical note sheets, and other related drawings in accordance with KYTC format, with the capacity of preparing full size 22" X 36" and reduced size 11" X 17" CADD drawings.

Preparing and Interpreting Subsurface Logs in accordance with KYTC format.

Preparing Geotechnical Engineering Reports for roadways and structures in accordance with KYTC format.

Analyzing and/or designing embankments, soil and rock cuts, reinforced soil slopes, and landslide and rock fall corrections for transportation facilities.

Preparing geotechnical engineering analyses for shallow and deep foundations (e.g. driven piles and drilled shafts) and retaining structures (e.g. cantilever, mechanically stabilized earth, tieback, and soil nail walls) for transportation facilities.

Monitoring geotechnical construction of transportation facilities, including but not limited to: compaction of embankments and soil sub grades, excavation for roadway cuts and structure foundations, construction of retaining structures, and installation of deep foundations.

Interpreting data from geotechnical instrumentation installed in slopes, retaining walls, deep foundations and other related facilities.

Formal training and/or experience with Load and Resistance Factor Design (LRFD).

Seismic Geotechnical Engineering Experience & Capabilities

Performing seismic geotechnical engineering analyses for the design of bridges, embankments, dams, and/or other major structures, including: Simplified Seismic Site Response, Equivalent-Linear One Dimensional Site Response, Liquefaction, Earthquake Induced Settlement, Pseudo-Static Seismic Slope Stability, and other related analyses.

Geotechnical Laboratory Qualifications & Capabilities

AASHTO Accreditation (R18) for the following AASHTO test methods: R58, T88, T89, T90, T99, T100, T193, T208, T216, T296, T297, T265; and capable of performing KM64-501(CBR by Kentucky Method) KM 64-513 (Slake Durability), KM-64-514 (Jar Slake), and ASTM D 2938 or KM 64-523 (Unconfined Compression Test on Rock).

Refer to the Schedule of Laboratory Tests and Specified Production Rates in the Word document described below for a list of laboratory tests. The selected firms will be expected to have the capacity to perform tests included in Items 1-12 in this schedule. Items 13-20 may be used on rare occasions; so, the capability to perform these tests is desirable, but not necessary in order to be selected to receive a contract. Firms should indicate which tests they are capable of performing in their response.

Ability to use gINT software to store and report laboratory data in the gINT library file provided by KYTC.

The hourly rate for engineering and laboratory testing services will be based upon "loaded" rates determined from the audited average hourly rates and multipliers (overhead and cost of money plus an operating margin of 10% for geotechnical engineering and 15% for laboratory testing). All applicable rates will be from audits performed by the Division of Audits, External Audit Branch. Invoices will be paid by the Geotechnical Branch based upon the average hourly rates of the personnel classifications and multipliers contained in the most recent audit report at the time of the Notice to Proceed for this contract. Payment may be adjusted by the Division of Audits, External Audit Branch and/or the Division of Professional Services.

For geotechnical engineering services, the Department will pay for the actual hours worked, up to the specified ceiling rates (maximum allowable hours); time records will be required. For laboratory testing services, the Department will pay the specified production rates per unit; time records will not be required. The production rates (hours per unit of work) are specified below in the Summary of Specified Ceiling Rates for Engineering Tasks and the Summary of Laboratory Tests and Specified Production Rates. The Geotechnical Branch may specify classifications of personnel for engineering tasks on a project by project basis. There may be project specified exceptions for engineering tasks if preapproved in writing. Roadway design services (including surveying) will be paid as Lump Sum determined from the audited average hourly rates and multipliers (overhead and cost of money plus an operating margin of 15%) with hours to be negotiated for each individual letter agreement. The Department will reimburse the consultant for any direct cost expenses preapproved in writing at the actual cost (with receipts).

[Click here for a Word document containing a Summary of Specified Ceiling Rates for Engineering Tasks and Production Rates for Laboratory Tests](#)

Professional Liability Insurance

Firms must provide proof of \$1,000,000 of professional liability insurance in order to receive a statewide geotechnical engineering and laboratory testing contract.

Instructions for Response to Announcement can be found at:

<http://transportation.ky.gov/Professional-Services/Pages/Respond-to-an-Announcement.aspx>

XII. PREQUALIFICATION REQUIREMENTS

To respond to this project, the proposed consultant project team must be prequalified in the following areas prior to the date of this advertisement.

GEOTECHNICAL SERVICES

- [Engineering](#)
- [Laboratory Testing](#)

XIII. PROCUREMENT SCHEDULE

Dates other than Response Date are tentative and provided for information only.

RESPONSE DATE • April 30th, 2014 4:30 p.m. E.S.T. (Frankfort time)

FIRST SELECTION COMMITTEE • May 6th, 2014

FINAL SELECTION COMMITTEE • May 21st, 2014

CONTRACT SCOPING CONFERENCE • May 28th, 2014

NOTICE TO PROCEED • July 1st, 2014

XIV. PROJECT SCHEDULE

Individual project schedules will be by letter agreement on a project by project basis.

XV. EVALUATION FACTORS

1. Relative experience of consultant personnel assigned to project team with Highway projects for KYTC and/or federal, local or other state governmental agencies. (15 Points)
2. Capacity to comply with project schedule (10 points).
3. Past record of performance on projects of similar type and complexity. (15 Points)
4. Project approach and proposed procedures to accomplish services for project. (15 Points)
5. DBE Participation Plan (4points)
6. Consultant's offices where work is to be performed. (2 points)

For state-funded projects, if a Selection Committee vote results in a tie between two (2) firms, one (1) of which will perform more of the work tasks in Kentucky than the other, then the former firm shall be ranked one (1) place ahead of the latter.

XVI. SELECTION COMMITTEE MEMBERS

1. Bart Asher, PE, User Division
2. Darrin Beckett, PE, User Division
3. Carl Van Zee, PE, Secretary's Pool
4. Diana Radcliffe, PE, Secretary's Pool
5. Brad Rister, PE, Governor's Pool